

FIG. 1  
(PRIOR ART)

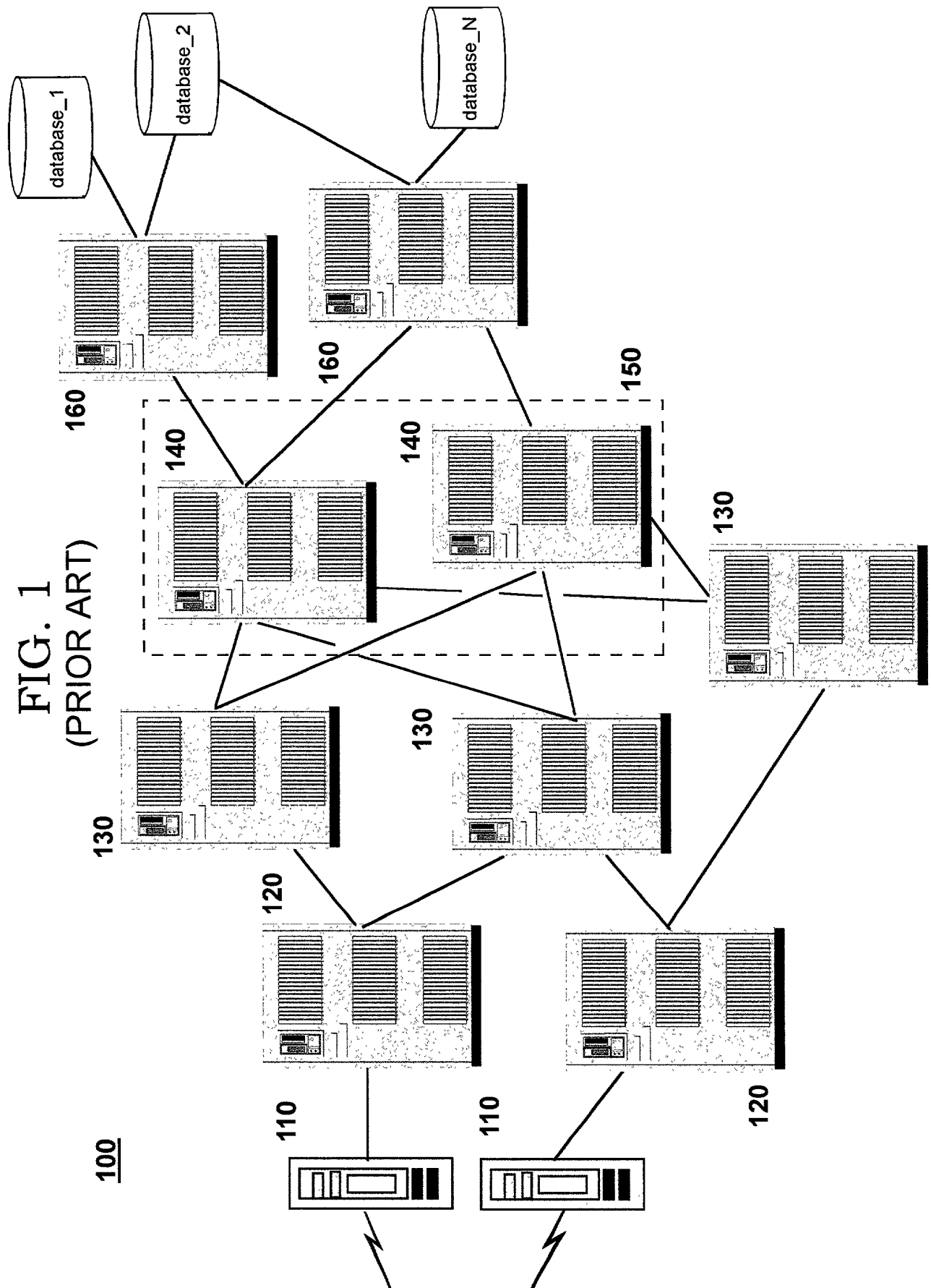


FIG. 2

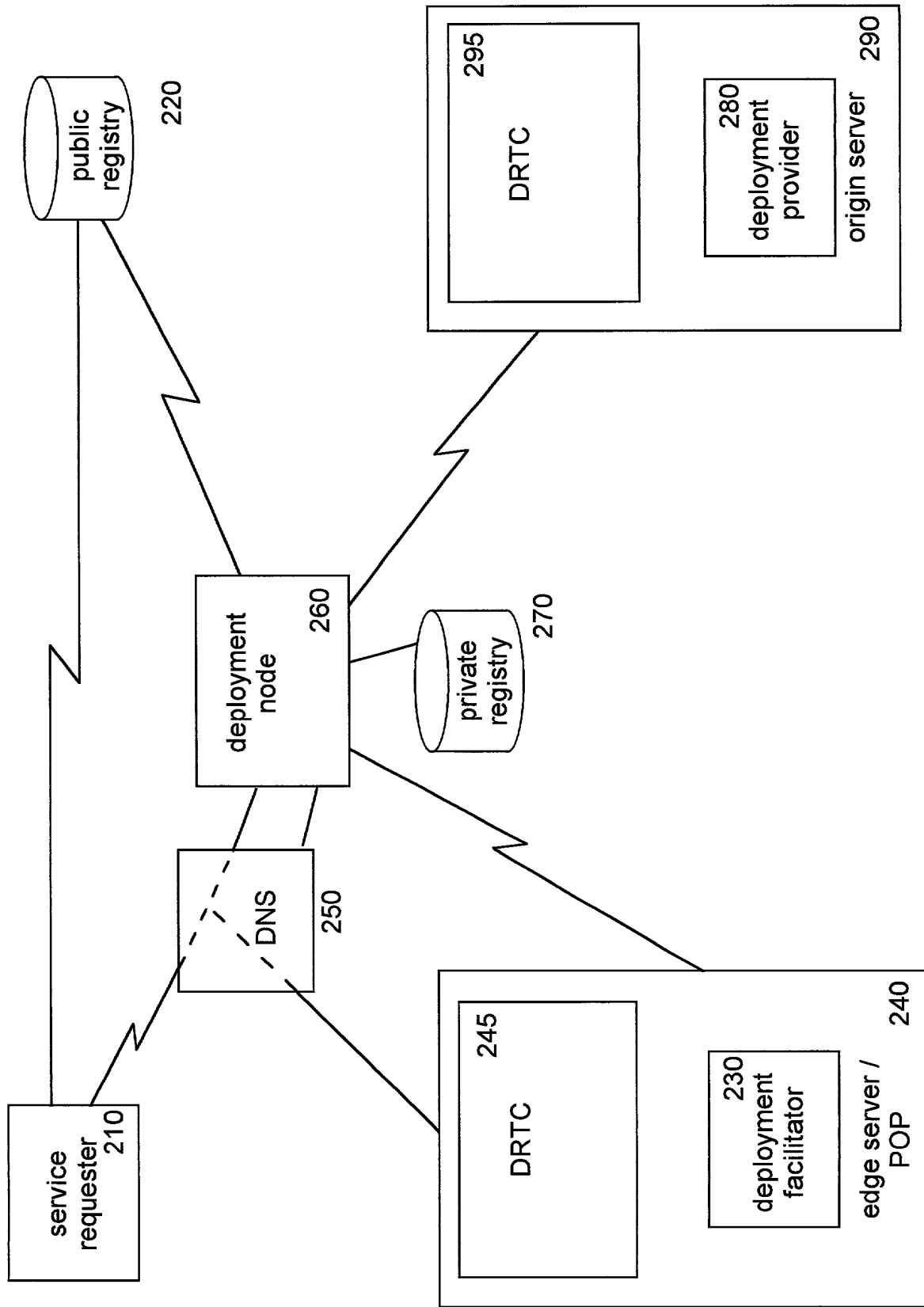


FIG. 3

300

UDDI Binding Key	POP	Usage Counter
xxx	San. Fran.	100
xxx	NYC	33

FIG. 4

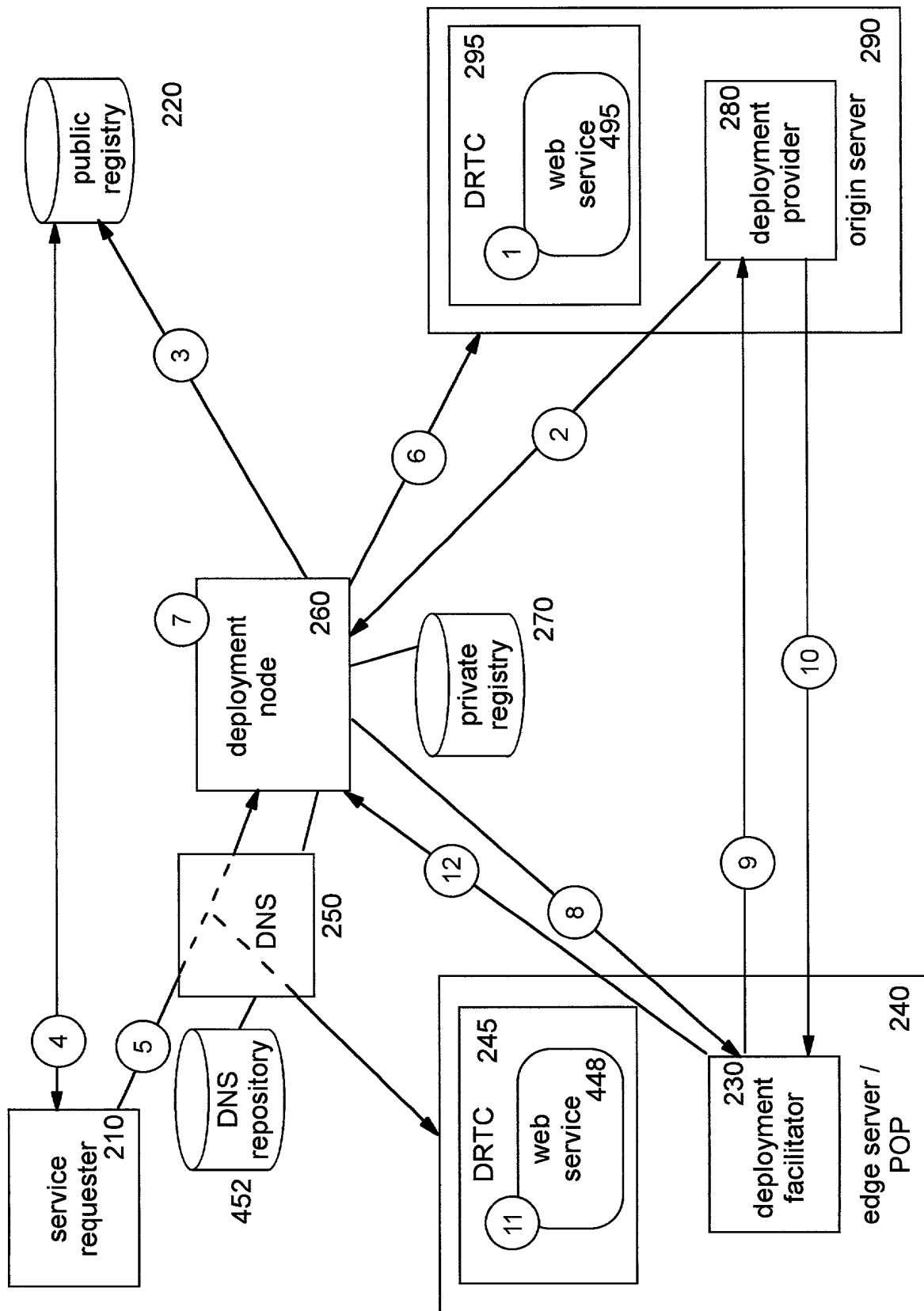


FIG. 5A

<?xml version="1.0"?> 510  
<definitions name="Deployment-interface"  
  targetNamespace="http://www.acme.com/Deployment-interface"  
  xmlns:xsd="http://www.w3.org/2000/10/XMLSchema"  
  xmlns:xsd1="http://www.acme.com/deploy/schema"  
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"  
  xmlns="http://schemas.xmlsoap.org/wsdl/">  
  
  <types>  
    <schema targetNamespace="http://www.acme.com/deploy/schema"  
      xmlns="http://www.w3.org/2000/10/XMLSchema">  
      <element name="ArchiveRef">  
        <attribute name="href" type="uriReference"/>  
      </element>  
      <complexType name="ArrayOfBinary">  
        <complexContent>  
          <restriction base="soapenc:Array">  
            <attribute ref="soapenc:arrayType" arrayType="xsd:binary[]"/>  
          </restriction>  
        </complexContent>  
      </complexType>  
    </schema>  
  </types>  
  
  <message name="DeploymentRequest">  
    <part name="serviceName" type="xsd:string"/>  
    <part name="runtimeEnvironment" type="xsd:string"/>  
  </message> 520  
  
  <message name="DeploymentResponse">  
    <part name="archiveRef" element="xsd1:ArchiveRef"/>  
    <part name="serviceArchive" type="xsd1:ArrayOfBinary"/>  
  </message> 530

FIG. 5A "303+9660"

## FIG. 5B

```
<portType name="DeploymentProvider">
540 <operation name="getDeployedService">
    <input message="tns:DeploymentRequest"/>
    <output message="tns:DeploymentResponse"/>
</operation>
</portType>

<binding name="DeploymentProviderBinding" type="tns:DeploymentProvider">
    <soap:binding style="rpc"
        transport="http://schemas.xmlsoap.org/soap/http"/>
    <operation name="getDeployedService">
        <soap:operation soapAction="http://www.acme.com/deploy"/>
        <input>
            <soap:body use="encoded"
                namespace="urn:www.acme.com:deploy"
                encodingStyle="http://schemas.xmlsoap.org/soap/encoding/" />
        </input>
        <output>
            <mime:multipartRelated>
            <mime:part>
                <soap:body parts="archiveRef" use="literal"
                    namespace="urn:www.acme.com:deploy"/>
            </mime:part>
            <mime:part>
                <mime:content part="serviceArchive"
                    type="application/octet-stream"/>
            </mime:part>
            </mime:multipartRelated>
        </output>
    </operation>
</binding>
</definitions>
```

560

550

FIG. 5B

## FIG. 5C

```
<?xml version="1.0"?>
<definitions name="Deployment"
  targetNamespace="http://www.acme.com/Deployment"
  xmlns:xsd="http://www.w3.org/2000/10/XMLSchema"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:interface="http://www.acme.com/Deployment-interface"
  xmlns="http://schemas.xmlsoap.org/wsdl/">

  <import namespace="http://www.acme.com/Deployment-interface"
    location="http://www.acme.com:80/services/Deployment-interface.wsdl"/>

  <service name="DeploymentProvider">
    <documentation>Acme.Com Deployment Service</documentation>
    <port name="DeploymentProvider" binding="interface:DeploymentProviderBinding">
      <soap:address location="http://www.acme.com:80/soap/servlet/rpcrouter"/>
    </port>
  </service>
</definitions>
```

FIG. 5C

## FIG. 6

POST /ServiceDeployment HTTP/1.1  
Host: www.acme.com  
Content-Type: text/xml; charset="utf-8"  
Content-Length: nnnn  
SOAPAction: "http://www.acme.com/deploy"

<SOAP-ENV:Envelope  
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"  
  SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">  
  <SOAP-ENV:Body>  
    <m:getDeployedService xmlns:m="urn:www.acme.com:deploy">  
610   <serviceName>urn:www.acme.com:stockquoteservice</serviceName>  
620   <runtimeEnvironment>Windows 2000, Apache SOAP V2.1,  
      Java</runtimeEnvironment>  
    </m:getDeployedService>  
  </SOAP-ENV:Body>  
</SOAP-ENV:Envelope>

FIG. 6



## FIG. 7

HTTP/1.1 200 OK

MIME-Version: 1.0

Content-Type: Multipart/Related; boundary=MIME\_boundary; type=text/xml;  
start="<http://www.acme.com/deployment061400a.xml>"

Content-Description: This is the optional message description.

--MIME\_boundary

Content-Type: text/xml; charset=UTF-8

Content-Transfer-Encoding: 8bit

Content-ID: <http://www.acme.com/deployment061400a.xml>

Content-Location: http://www.acme.com/deployment061400a.xml

<?xml version='1.0' ?>

<SOAP-ENV:Envelope xmlns:SOAP-ENV="

http://schemas.xmlsoap.org/soap/envelope/">

<SOAP-ENV:Body>

<m:getDeployedServiceResponse xmlns:m="urn:www.acme.com:deploy">

710 <ArchiveRef href="http://www.acme.com/com/foo/stockquoteservice.ear" />

</m:getDeployedServiceResponse>

...

</SOAP-ENV:Body>

</SOAP-ENV:Envelope>

--MIME\_boundary

Content-Type: application/octet-stream

Content-Transfer-Encoding: binary

720 Content-ID: <http://www.acme.com/com/foo/stockquoteservice.ear>

Content-Location: http://www.acme.com/foo/stockquoteservice.ear

730 ... binary EAR file ...

--MIME\_boundary--

deployment061400a.xml

FIG. 8

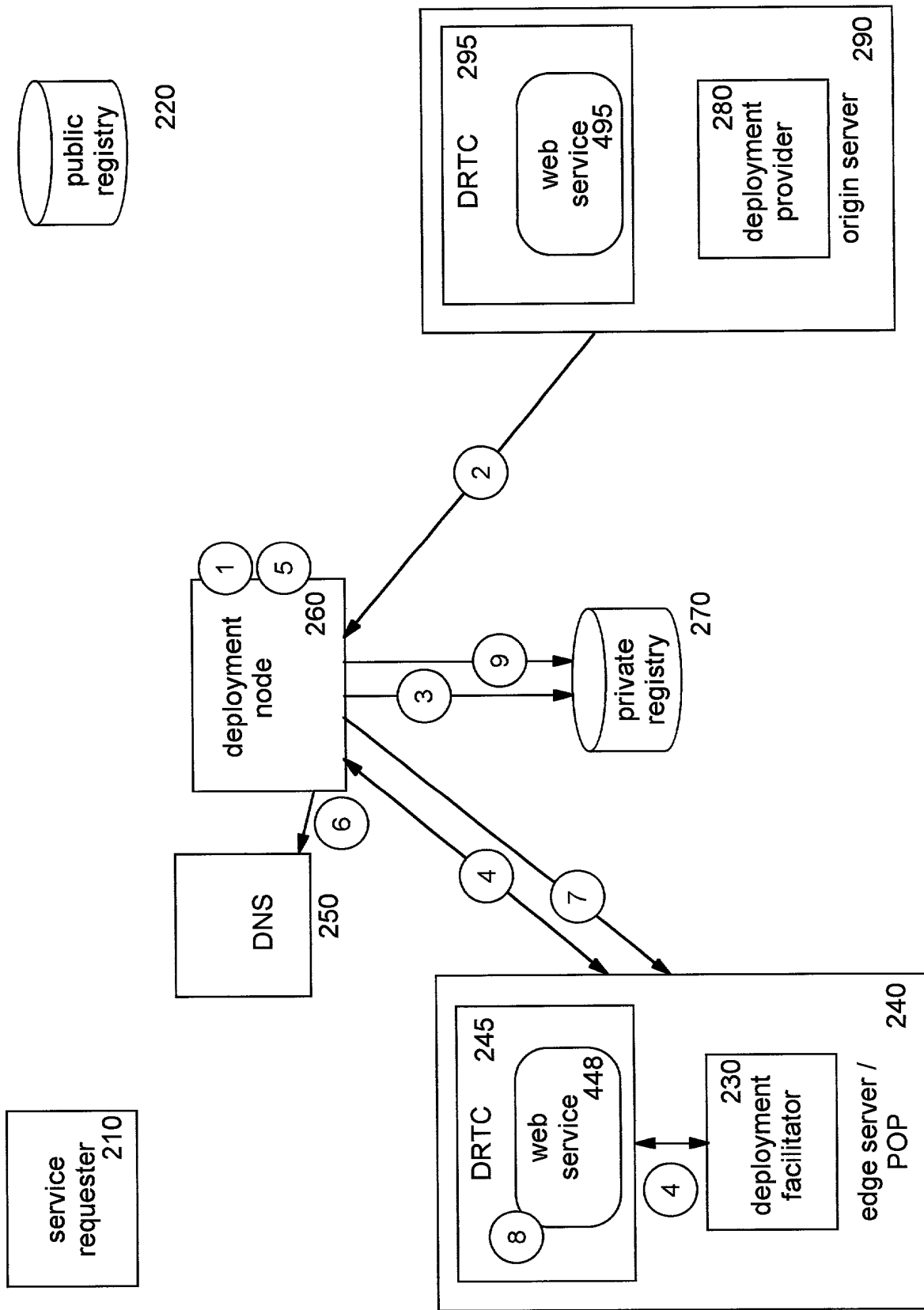


FIG. 9

900

Deployed Service	910	Deployed to	920
xxx		1.2.3.4	
xxx		4.3.2.1	
yy		1.2.3.4	
zzz		5.6.7.8	

FIG. 10

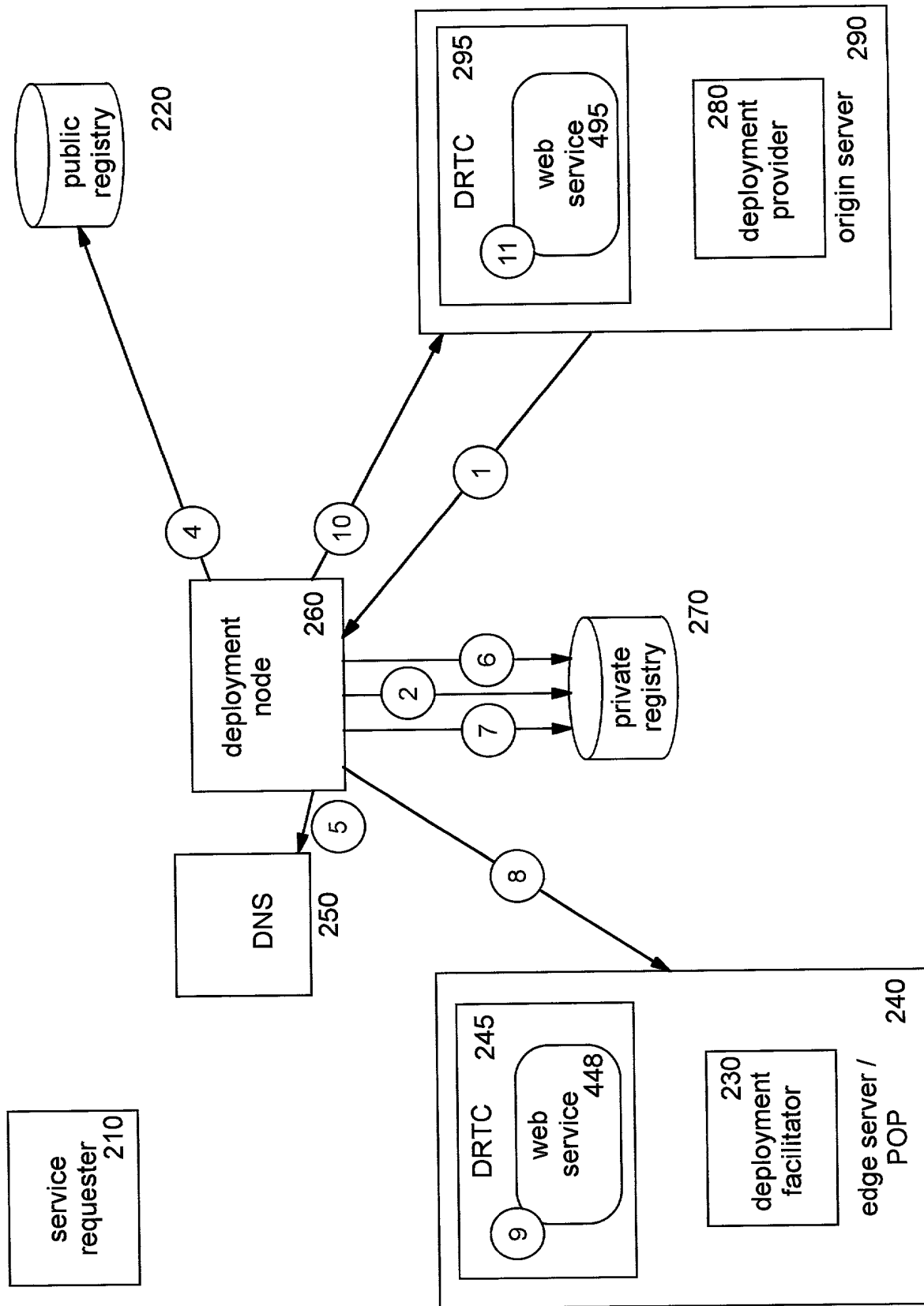


FIG. 11

